

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



In re Application of:

Malcolm et al.

Serial No.: 09/198,723

Filed: November 24, 1998



Examiner: To be Assigned  
Group Art Unit: To be Assigned  
Date: August 10, 1999

#5-21/00  
T. Gray

For: SINGLE-CHAIN RECOMBINANT COMPLEXES OF HEPATITIS C VIRUS NS3 PROTEASE AND NS4A COFACTOR PEPTIDE

Information Disclosure StatementAssistant Commissioner For Patents  
Washington, D.C. 20231

Sir,

It is respectfully requested that the following documents, as listed below and on the accompanying form PTO-1449, be considered and made of record:

Urbani et al., 1997, *J. Biol. Chem.* **272** (14): 9204-9209;

Steinkuhler et al., 1996, *J. Virology*, **70** (10): 6694-6700;

Landro et al., 1997, *Biochemistry* **36**, 9340-9348;

Zhang et al., 1997, *J. Virology* **71** (8): 6208-6213;

Kim et al., 1996, "Crystal Structure of the Hepatitis C Virus NS3 Domain Complexed with A Synthetic NS4A Cofactor Peptide," *Cell* **87** (4): 343-355;

Yan et al., 1998, "Complex of NS3 Protease and NS4 Peptide of BK Strain Hepatitis C Virus," *Protein Science*, **7** (4): 837-347;

Bartenschlager, et al., 1995 "Complex Formation Between The NS3 Serine-Type Proteinase of the Hepatitis C Virus and NS4A and Its Importance For Polyprotein Maturation," *J. Virology* **69** (12): 7519-7528

Lin et al., 1994, "Hepatitis C Virus NS3 Serine Proteinase: Trans-Cleavage Requirements and Processing Kinetics," *J. Virology*, **68** (12): 8147-8157;

Kim et al., 1995, "C-Terminal Domain of the Hepatitis C Virus NS3 Protein Contains An RNA Helicase Activity," *Biochemical and Biophysical Research Communications*, **215** (1,4): 160-166.

Taremi *et al.*, 1998, "Construction, Expression, and Characterization of a Novel Fully Activated Recombinant Single-Chain Hepatitis C Virus Protease," *Protein Science*, **7** (10): 2143-9, Journal Code: BNW, ISSN: 0961-8368;

Dimasi *et al.*, 1998, "Engineering, Characterization and Phage Display of Hepatitis C Virus NS3 Protease and NS4A Cofactor Peptide as a Single-Chain Protein," *Protein Engineering*, **11** (12): 1257-65, Journal Code: PR1, ISSN: 0269-2139

WO 9636702 A 11/1996 PCT;

WO 9708304 A 3/1997 PCT;

International Search Report.

While no fee is believed due in connection with the filing of this Information Disclosure Statement, the Commissioner is hereby authorized to charge any fee which may be required to enter this paper and/or to properly consider the references cited herein to Deposit Account No. 19-0365.

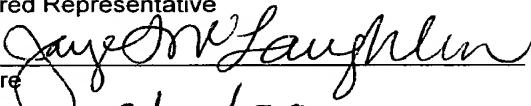
Respectfully submitted,

Schering-Plough Corporation  
2000 Galloping Hill Road  
Patent Department, K-6-1, 1990  
Kenilworth, NJ 07033  
(908)298-2906  
August 10, 1999

  
Jaye P. McLaughlin  
Reg. No. 41,211

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

August 10, 1999  
Date of Deposit

Jaye P. McLaughlin  
\_\_\_\_\_  
Registered Representative  
  
\_\_\_\_\_  
Signature  
8/10/99  
\_\_\_\_\_  
Date of Signature